2. In a method of claim 1 wherein said two applied electric fields are orthogonal.

3. In a method of claim 1 wherein said two applied electric fields are sequentially applied.

4. In a method of claim 1 wherein said electric fields are applied in the sequence, first to load said metal with isotopic fuel, and second to effect redistribution of the fuel within said loaded metal.

5. In a method as in claim 1, where the isotopic fuel is a member of the group consisting of an isotope of hydrogen, boron, lithium, or potassium.

6. In a method as in claim 1, where the material is a member of the group consisting of palladium, titanium, or nickel or their alloys.

7. In a method as in claim 6, where the material is an electrochemical cathode.

8. In a method as in claim 1, where the additional step is taken of applying a magnetic field intensity through said material.

9. In a method as in claim 8, where the applied magnetic field intensity is inhomogeneous.

10. In a process for producing a product using a material by a reaction, a method to control the production of said product which includes in combination:

supplying an isotopic fuel to said material,

loading said isotopic fuel into said material by an applied electric field, and

applying the second applied electric field to redistribute said isotopic fuel.

11. In a method as in claim 10, where the isotopic fuel is a member of the group consisting of an isotope of hydrogen, boron, lithium, or potassium.

12. In a method as in claim 10, where the material is a member of the group consisting of palladium, titanium, or nickel.

13. In a method as in claim 10, where the additional step is taken of creating a gradient in the intensity of magnetic field through said material.

14. In a method as in claim 10, where the material is an electrochemical cathode.

15 An apparatus to produce a product using a material loaded with an isotopic fuel, which includes in combination:

means to supply said isotopic fuel to said material,

means to load said isotopic fuel into said material by an applied electric field, and

means to provide a second applied electric field to redistribute said isotopic fuel.

16. An apparatus as in claim 15, where the isotopic fuel is a member of the group consisting of an isotope of hydrogen, boron, lithium, or potassium.

17. An apparatus as in claim 15, where the material is a member of the group consisting of palladium, titanium, or nickel.

18. An apparatus as in claim 15, where at least one reaction at the material is electrochemical.

19. An apparatus as in claim 18, where the material is electrochemically polarized as the cathode.

20. An apparatus as in claim 15, where means are provided to concentrate, cluster, compact, or collect the isotopic fuel within a portion of the material.